



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/668,231

09/22/2000

Magnus H. Berggren

99RSS163

9935

20594

7590

04/02/2004

CHRISTOPHER J. ROURK
AKIN, GUMP, STRAUSS, HAUER & FELD, L.L.P.
P O BOX 688
DALLAS, TX 75313-0688

EXAMINER

MERID, ARADOM B

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 04/02/2004

[Handwritten mark]

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/668,231

Applicant(s)

BERGGREN ET AL.

Examiner

Aradom B. Merid

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 1, 6-9, 13-16 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to the claim 1 recitation "... calculating a decision value based up on a **first path metric** of a plurality path metrics....", it is not clear to the examiner whether **a first path metric** in the claimed invention is the same as **a best path metric** as disclosed in the specification (see applicants specification on page 4, lines 9-12). Also as to the recitation "calculating a confidence value based upon the first path metric and **a second path metric** of the plurality path metrics" (of claim 1), it is not clear to the examiner whether **a second path metric** in the claimed invention is the same as **a second best path metric** as disclosed in the specification.

Claims 2-8 are inherently rejected because they are dependent on the rejected base claim 1.

As to the claim 9 recitation “ logic for setting a soft slicer decision value based up on a first path metric of a plurality path metrics;” and “...calculating a confidence value based upon a difference between the first path metric of the plurality of path metrics and a second path metric of the plurality of path metrics;” please see the discussion of claim 1 rejection.

Claims 10-15 are inherently rejected because they are dependent on the rejected base claim 9.

As to claim 16 recitation “logic for calculating a confidence value based upon a difference between the first path metric of the plurality of path metrics and a second path metric of the plurality of path metrics;” , and “logic for setting a soft slicer decision value based up on a first path metric of a plurality path metrics;” , please see the discussion of claim 1 rejection.

Claims 17-20 are inherently rejected because they are dependent on the rejected base claim 16.

2. As to claims 6 and 14, the specification fails to point out the criteria's used to describe ***“the first path metric is a best path metric and the second path metric is a second best path metric”*** of the claimed invention.

As to claims 7 and 13 recitations , there is no description (mention) of ***“ a first threshold value”*** and ***“ a second threshold value”*** in the specification.

And as to claim 19 recitation, there is no description of ***“ ...wherein the confidence value is set to a threshold value if the confidence value is***

greater than the threshold value in the specification. (see applicant's specification on page 19, lines 5-7).

As to claims 8, 15 and 20 the specification fails to describe how the path metrics are calculated based on "***a nominal trace-back length***". (see applicant's specification on page 19, lines 9-13).

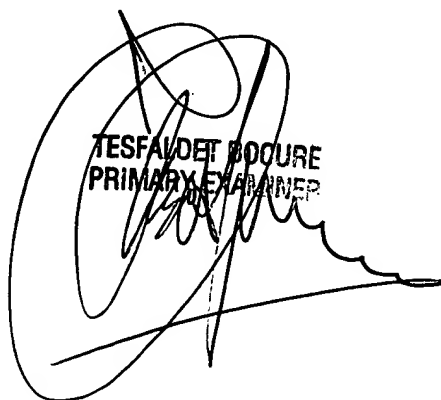
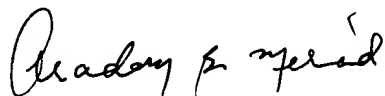
Art Unit: 2631

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aradom B. Merid whose telephone number is 703-305-8953. The examiner can normally be reached on 8:00am-5:00pm (Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aradom B. Merid



TESFADET BOUCURE
PRIMARY EXAMINER